

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

RLI INSURANCE COMPANY,)	
)	C.A. No. 05-858
)	
Plaintiff,)	
)	
v.)	JURY TRIAL DEMANDED
)	
INDIAN RIVER SCHOOL DISTRICT,)	
EDIS COMPANY, and)	
BECKER MORGAN GROUP, INC.,)	
)	
Defendants.)	

**DECLARATION OF KEITH HUGHES
IN SUPPORT OF INDIAN RIVER SCHOOL DISTRICT'S
RENEWED MOTION TO STRIKE PLAINTIFF'S EXPERT REPORT**

Pursuant to 28 U.S.C. § 1746, I, B. Keith Hughes, make the following declaration:

1. I am employed by FTI Consulting, Inc. and have been retained by IRSD as its trial expert on the subject of critical path analysis.
2. My qualifications are set forth on the Curriculum Vitae attached as Exhibit "1."
3. I have reviewed PCM's Original Report, dated July 31, 2007 and PCM's Revised Report, dated February 4, 2008.
4. This Declaration is not intended to be a rebuttal to PCM's new analysis and is offered only to provide the court with the basic information necessary to understand the issues pointed out by IRSD in its Renewed Motion to Strike.
5. I understand that the Court's December 4, 2007 Memorandum Opinion required PCM to "address the Report's substantive failings by ... by identifying with greater clarity and precision the analysis methodology." The Revised Report does nothing to add clarity and

precision to the analysis methodology set forth in the Original Report. The Revised Report simply repeats the original analysis with minor typographical and other changes having nothing to do with explaining the original methodology.

The New Analysis is Materially Different than the Original Analysis

6. The Revised PCM Report adds a new section with a new analysis of the scheduling for the Project. This new analysis materially differs from the original analysis. The new analysis uses a November 18, 2002 baseline schedule.¹ RLI provided the electronic version of this schedule to IRSD with the revised report. From that electronic data I can confirm that this schedule, and all the schedule updates discussed in subsequent paragraphs, was prepared using the Primavera Software System. Attached hereto as Exhibit "2" is a printed copy of PCM's November 18, 2002 baseline schedule. I have included float bars on this printout, which can be hidden or included when printing or reviewing a schedule.

7. The original analysis was based upon a baseline schedule contained in the Contract Documents and is shown on page 5 of the original report. Since RLI did not provide the original baseline schedule in electronic format, I am unable to determine what software program PCM used to generate that schedule. However, PCM states in the revised report that it used both Primavera and Timelines for Windows to perform its analyses. Revised Report, p. 5. I assume that the original baseline was generated using Timelines for Windows, since I know the new baseline was generated using Primavera.

8. The planned sequences of construction are materially different in the two baseline schedules. The baseline in the original analysis has only 20 work activities. Original Report, p. 5. The November 18, 2002 baseline schedule has 164 activities. See Exhibit "2."

¹ Throughout PCM's revised report it refers to the baseline schedule as either the November 18, 2002, the November 19, 2002 or the November 12, 2002 schedule. PCM's baseline schedule is dated November 18, 2002 and I believe that the references to other dates are typographical errors.

9. The critical paths calculated by the two baseline schedules are significantly different.

10. Again, since RLI did not provide any electronic data with its original report, I cannot state with certainty, but believe that the plate on page 5 of the original report is PCM's calculation of the critical path under the original baseline schedule. Generally, red bars in CPM scheduling denote critical activities, therefore I assume that the red bars on the plate indicate the critical path activities.

11. The critical path calculated from the November 18, 2002 baseline schedule is set forth on the plate on page 89 of the revised report. Only the activities included on that plate that have a total float of 3d are critical path activities (because they are the longest chain of interrelated activities from the beginning to completion of the project). The activities with total float of 7d are not critical path activities.

12. The critical paths calculated from these two baseline schedules have only one activity in common, finishes.

Logic in the New Analysis

13. The November 18, 2002 baseline schedule fails to use appropriate logic ties, or in other words, fails to show the interdependence of work activities to one another.

14. The float bars on the November 18, 2002 baseline schedule, Exhibit "2", demonstrate the lack of logic.

15. The key at the bottom left corner of the schedule indicates that the thin black line and green triangles on the schedule are float bars.

16. An activity's available float reflects the amount of time that the activity can be delayed without delaying the project's completion date.

17. The total float for each activity is also reflected in number of work days, in the farthest right column on the schedule.

18. Float will be expended for each activity having available float if the work is not completed by the date indicated in the fourth to last column from the right, headed "Early Finish."

19. With respect to logic ties, if an activity does not have successor logic ties then its "Late Finish" date will float out to the project completion date, or in other words show on the schedule as being able to complete on the project's completion date without delaying that completion.

PCM's Delay Summary is not Based on a Delay to the Critical Path

20. The summary charts beginning on p 108 of PCM's Revised Report are simply comparisons of the planned duration of activities in the Baseline Schedule to the durations reflected in an August 31, 2004 update. Only the Building B Pedestals, Building B Block Walls Below Grade, Building F Erect Steel & Metal Deck, Building B Erect Steel & Metal Deck and Building B Exterior Metal Studs & Sheath were on the Baseline Schedules critical path. The charts show that planned durations were exceeded although they provide no identification of the cause or the resulting impact on Project completion.

21. The PCM Revised Report did not include a summary chart comparing the planned duration of the mechanical activities to the durations reflected in the August 31, 2004 update. The summary chart comparing the planned duration of mechanical activities in the June 30, 2003 update to the durations in the August 31, 2004 update reflects mechanical activities starting earlier than planned, in some cases, and taking much longer than planned in virtually all cases. The June 30, 2003 update was the first update that PCM included the mechanical

activities in the same level of detail as in the August 31, 2004 update. The summary mechanical activities chart, which was prepared using PCM's electronic schedule data, shows the same increased durations as the charts in the Revised Report. Exhibit "3".

The Delay Analysis Does Not Use a Consistent Method to Measure Delay

22. As shown in the November 18, 2002 baseline schedule, August 2, 2004 is the completion date for the project as set forth in the "Late Finish" at activity 278 (second column from the right) of the Baseline Schedule. Exhibit "2"

23. PCM calculated its analysis of delay by measuring the progress of the work at various intervals with the planned progress as reflected in the Baseline Schedule.

24. The first measurement of progress after the Baseline Schedule was on January 27, 2003 and PCM created a schedule update as of that date ("Update 1") to reflect the status of the work. Update 1 was also provided to IRSD in electronic format at the time PCM served its revised report and a printed copy is attached hereto as Exhibit "4"

25. PCM inputted the required completion date into the program as July 28, 2004 (see the "Late Finish" at activity 278), the date after which the project would be delayed if not complete, not the August 2, 2004 date used in the baseline.

26. The -18 days in the total float column at Activity 278 in Update 1 is the number of work days after July 28, 2004 the project is projected to be complete.

27. The second measurement of progress after the Baseline Schedule was on April 29, 2003 and PCM created a schedule update as of that date ("Update 2") to reflect the status of the work, which PCM provided to IRSD in electronic format at the time PCM served its revised report. Printed copy of Update 2 is attached hereto as Exhibit "5."

28. PCM inputted the required completion date into the program as May 31, 2004 (see the "Late Finish" at activity 278), the date after which the project would be delayed if not complete, not the August 2, 2004 date used in the baseline.

29. The -104 days in the total float column at Activity 278 in Update 2 is the number of work days after May 31, 2004 the project is projected to be complete.

30. The third measurement of progress after the Baseline Schedule was on June 30, 2003 and PCM created a schedule update as of that date ("Update 3") to reflect the status of the work. A printed copy of Update 3 is attached hereto as Exhibit "6."

31. In update 3, PCM goes back inputting an August 2, 2004 required completion date into the program (see the "Late Finish" at activity 278), generating a -23 days total float, at Activity 278.

I declare under the penalty of perjury that the foregoing information is true and correct to the best of my knowledge and belief.

Dated: February 28, 2008

A handwritten signature in black ink, appearing to read "B. Keith Hughes", written over a horizontal line.

B. KEITH HUGHES